

In the Claims:

1 – 31. (Canceled).

32. (Currently amended) A method of illuminating a target comprising:

a) transmitting light from a light source to a proximal end of a light guide bundle via a spatial light modulator wherein the spatial light modulator transmits the light substantially only to cores of light guides in the light guide bundle;

b) transmitting the light from the proximal end of the light guide bundle to a distal end of the light guide bundle and emitting the light from the distal end of the light guide bundle; and,

c) illuminating the target with the light emitted from the distal end of the light guide bundle.

~~The method of claim 31~~ wherein the method comprises scanning a light beam across the spatial light modulator and simultaneously setting at least one pixel of the spatial light modulator that corresponds to a core of one of the light guides to an on-state to provide at least one on-pixel and setting other pixels of the spatial light modulator to an off-state, whereby the light beam is transmitted substantially only to the core of the light guide when the light beam contacts the on-pixel and the light beam is not transmitted to inter-core areas of the light guide bundle or to light guides adjacent to the light guide.

33. (Original) The method of claim 32 wherein the light beam is a laser beam.

34. (Original) The method of claim 32 wherein the method comprises scanning the light beam across substantially all pixels that are set to an on-state over time such that substantially all of the light guides in the light guide bundle are illuminated, thereby illuminating substantially all of the target within a field of view of the light guide bundle without moving the light guide bundle.

35. (Canceled)

36. (Currently amended) A method of illuminating a target comprising:

a) transmitting light from a light source to a proximal end of a light guide bundle via a spatial light modulator wherein the spatial light modulator transmits the light substantially only to cores of light guides in the light guide bundle;

b) transmitting the light from the proximal end of the light guide bundle to a distal end of the light guide bundle and emitting the light from the distal end of the light guide bundle; and,

c) illuminating the target with the light emitted from the distal end of the light guide bundle.

wherein the method comprises optically connecting the light source to the spatial light modulator such that the light source illuminates a substantial portion of the pixels of the spatial light modulator, and setting selected corresponding pixels to an on-state and setting other pixels of the spatial light modulator to an off-state such that light from the light source is transmitted substantially only to the cores of the light guides corresponding to the corresponding pixels.

The method of claim 35 wherein the method comprises varying the selected corresponding pixels that are set to an on-state over time such that substantially all of the light guides in the light guide bundle are illuminated, thereby illuminating substantially all of the target within a field of view of the light guide bundle without moving the light guide bundle.

37-47. (Canceled)

48. (Previously Presented) The method of claim 36 wherein the method comprises selecting the selected corresponding pixels that are set to an on-state such that light emanating from the distal end of a first light guide corresponding to a first selected corresponding pixel does not substantially interfere with light emanating from the distal end of a second light guide corresponding to a second selected corresponding pixel.